

ATL-139

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michalakakis Averkiou et al.

Art Unit: 3305

Serial No.: 08/723,483

Examiner: F. Jaworski

Filed : September 27, 1996

For : ULTRASONIC DIAGNOSTIC IMAGING  
WITH CONTRAST AGENTS7/1/2  
8-5/8  
FAX COPY RECEIVED

JUL 21 1998

GROUP 3200

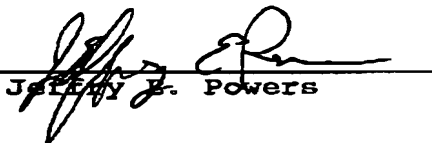
I hereby certify that this correspondence is being facsimile transmitted  
to fax number (703) 305-3579 of the U.S. Patent and Trademark Office  
in Arlington, Virginia

on July 17, 1998  
(Date of Transmission)W. Brinton Yorks, Jr.Name of applicant, assignee, or  
Registered RepresentativeW. Brinton Yorks, Jr.  
(Signature)7/17/98  
(Date of Signature)SUPPLEMENTAL DECLARATION UNDER 37 CFR §1.131

I, Jeffrey E. Powers, an inventor in the above-captioned patent application, declare as follows.

In further review of my Declaration of July 16, 1998 in the above-captioned patent application, I noticed that the engineering documentation submitted as part of that Declaration is for an ultrasound system module known at ATL as the "Advanced IF Output Module" which became part of ATL's ultrasound systems in 1994. The UM9 HDI ultrasound system used by Dr. Burns in the experiments in 1992 used a predecessor module called the "IF Output Module." Attached as Exhibit C is a block diagram of the IF Output Module used in Dr. Burns' ultrasound system. Its programmable digital filter is the "FIR FILTER" shown in the top center of the block diagram. The FIR FILTER is the "receive filter" referred to by Dr. Burns in the first paragraph of his report. As shown on enclosed page 23 of the engineering specification for the IF Output Module, the FIR FILTER operates in the same manner as the QBP filter described in the July 16 Declaration, performing both bandpass filtering and demodulation of the harmonic signal into Inphase and Quadrature samples (I and Q).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
\_\_\_\_\_  
Jeffrey Z. Powers

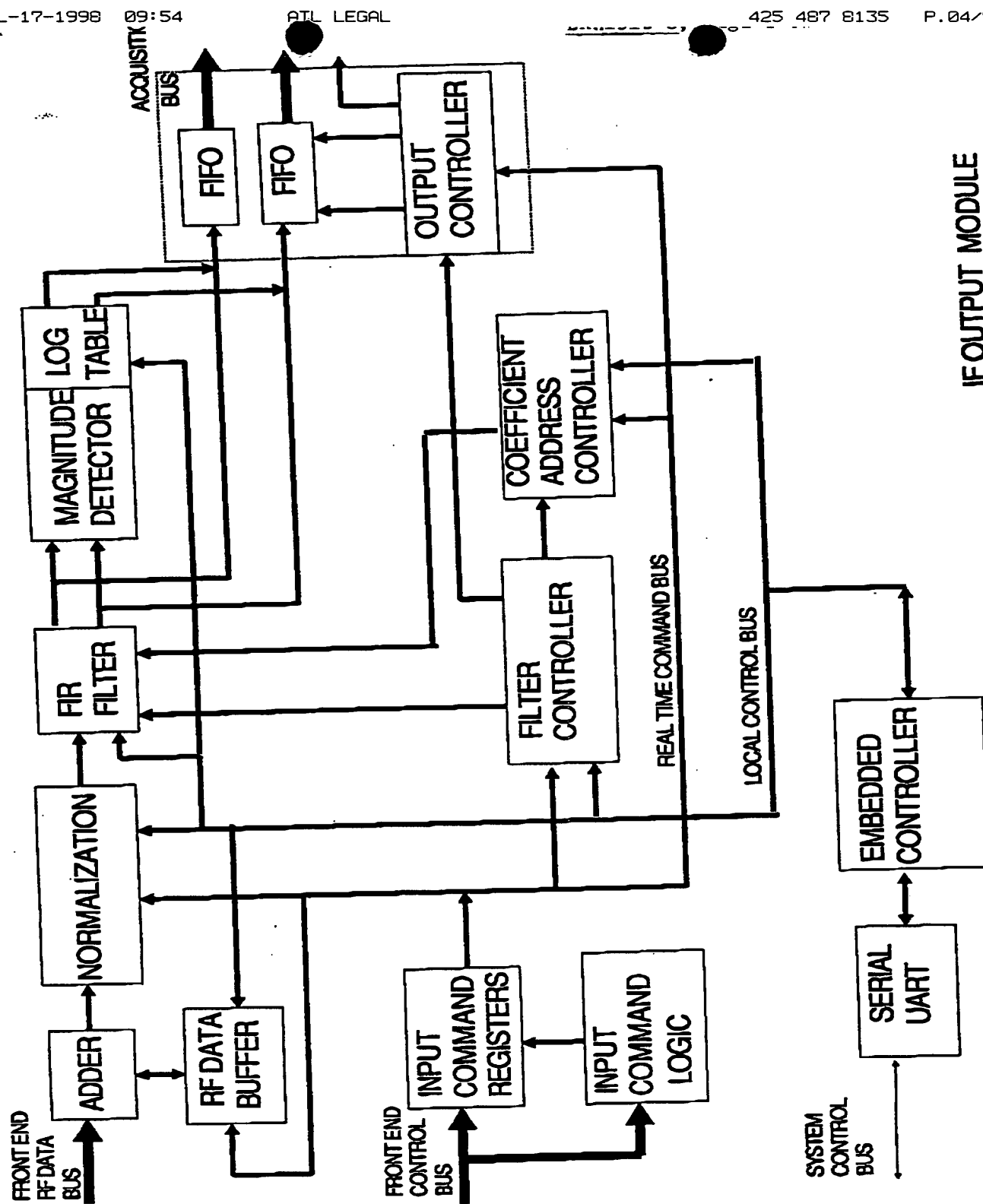
Date:

7/17/98

FAX COPY RECEIVED

JUL 21 1998

GROUP 3200



IF OUTPUT MODULE  
BLOCK DIAGRAM  
6/26/89

FIGURE 1.3